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ABSTRACT

This paper reports on a two-year study of a junior high school that was attempting to implement a new approach to student discipline. The study investigated the kinds of interventions that occurred during the two years and how the influence of these interventions were perceived by teachers. Implementing the new discipline plan involved university courses, workshops, and the participation of a change facilitator at the school. Data was obtained from individual and group interviews, an Intervention Questionnaire, and through an ethnographer. Among the findings were that changes in teachers seem to result from an accumulation of interventions, and that, when teachers do change, they usually perceive it to be of their own initiative. Changes in teachers' feelings and attitudes seem to precede any change in their use of an innovation. It was also found that, if the change process is to be most effective, interventions should be directed toward individuals. Analyses of data are presented and followed by specific recommendations for individuals who are responsible for managing educational change. (Author/JD)

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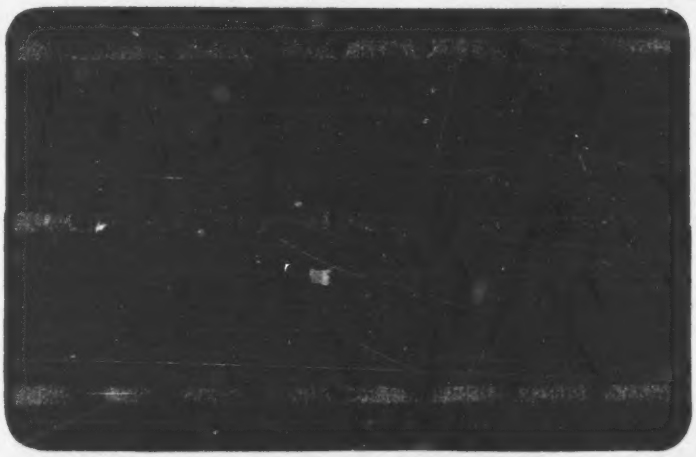

The Research & Development Center
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# A STUDY OF THE EFFECTS OF VARIOUS INTERVENTIONS IN A TWO-YEAR IMPLEMENTATION EFFORT

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Paper presented at the annual meeting of the
American Educational Research Association,
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## Abstract

A Study of the Effects of Various Interventions In A Two-Year Implementation Effort

This paper reports on a two-year study of a junior high school in the mid-western United States that was attempting to implement a new approach to student discipline. The implementation effort was conducted in connection with a Teacher Corps project.

The purpose of the study was to investigate the kinds of interventions that occurred during the two years and how the influence of these interventions were perceived by teachers. The following means were used to collect data during the period of the study: 1) five individual interviews with teachers to ascertain their Level of Use of the program, including two attempts to get intervention information, 2) individual and group interviews to determine the influence of interventions, 3) an Intervention Questionnaire developed to secure quantitative data on intervention effects and 4) ethnographic data collected by an on-site ethnographer.

Analyses of these data are presented and followed by specific recommendations for individuals who are responsible for managing educational change.

# A STUDY OF THE EFFECTS OF VARIOUS INTERVENTIONS IN A TWO-YEAR IMPLEMENTATION EFFORT[1]

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When any new program is introduced into a school it is invariably done with the hope that it will result in desired improvements in the area being changed. However, before such improvements can occur it is first necessary that all involved participants actually use the new program in a satisfactory way. Simply introducing a new program into a school does not assure that teachers will use it. There are likely to be teachers who do not believe in the program, others who are resistant to any type of change and still others who try but cannot make the program work for them. Thus, administrators and change agents are always faced with the problem of knowing what to do to help teachers as they attempt to use a new program. This paper reports on a two-year study that had as two of its objectives 1) to identify the interventions[2] that change facilitators and administrators made during a change process in a school and 2) how those interventions influenced teachers' use of a new program. From these data implications and recommendations are drawn that administrators and change agents in other settings can use to help teachers who are involved in a change process.

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[1]The research described herein was conducted under contract with the National Institute of Education. The opinions expressed are those of the author and do not necessarily reflect the position or policy of the National Institute of Education. No endorsement by the National Institute of Education should be inferred.

[2]Interventions are defined as actions or events that influence the use of an innovation.

## The Setting

In September, 1976, a new approach to student discipline was introduced into a junior high school in the midwestern United States. At the beginning of the study the faculty numbered 54 including special teachers and administrators. Forty-two of these persons remained in the school for the full two years. This being the only junior high in the community of approximately 40,000, it served all socioeconomic and ethnic groups. The decision to introduce the new program was based on a needs assessment conducted jointly by the school and a local university in the spring of 1975 in preparation for submission of a Teacher Corps proposal. All faculty members were invited to attend a meeting during summer, 1975 where needs of the school were discussed. That portion of the faculty that participated in this process indicated that student discipline was a major concern. Thus, when the Teacher Corps proposal was funded for two years the decision was made to introduce a new approach to discipline. It should be noted that during the study some teachers expressed the feeling that the initial needs assessment did not reflect the feelings of the whole faculty and that discipline in the school was not a problem. Reality Therapy as presented by William Glasser (1969) was selected by the Teacher Corps staff and approved by the principal, as the approach to discipline to be implemented. Over time the faculty made their own adaptations to this approach and the innovation gradually came to be known as Discipline Strategies, a term that will be used in the remainder of this paper.

## Data Collection

Throughout the two years of the project, the implementation process was studied by the Procedures for Adopting Educational Innovations (PAEI) program at

the Research and Development Center for Teacher Education at The University of Texas at Austin. A variety of data were collected during this period, (Hord, 1979). In this paper, information will be reported that reflects on the various interventions that occurred and their influence on teacher behavior.

Data on interventions were collected in several ways. An ethnographer was present in the junior high several days each week during the first year and several times each month during the second year. The ethnographer collected data on what Teacher Corps staff members, the principal and vice-principal and the change facilitators did to assist teachers in their use of the innovation, (Zigarmi & Goldstein, 1979). Five times during the study personal interviews were conducted by the PAEI staff with teachers to determine their Level of Use (Hall, et. al, 1975) of Discipline Strategies. In January of 1977, as an addendum to the Levels of Use (LoU) interview, teachers were asked the open-ended question "What events or actions have occurred since the new approach to discipline began that have influenced your use of it?"

In October, 1977, questions seeking intervention information were again asked in connection with the LoU interview. This time the teachers were first asked about the influence of two specific interventions on their use of Discipline Strategies. They were then asked to name other actions or events that may have influenced their use. Finally, several interventions were named and they were asked how these had influenced them, if at all.

In May, 1978, as the two-year study drew to a close, two more efforts were made to collect intervention data. A questionnaire was developed (Figure 1) that presented 26 items which the research team felt represented some of the more obvious interventions and were representative of the range and type of

Figure 1

Intervention Questionnaire

| N/A | - 1 | 0 | + 1 |
|---|---|---|---|
| Not Applicable | Led to less involvement with Discipline Strategies | Did not influence my involvement with Discipline Strategies | Led to more involvement with Discipline Strategies |

| | | | | | |
|---|---|---|---|---|---|
| 1. | Work of change facilitators with your satellite on Discipline Strategies during Planning period meetings. | N/A | -1 | 0 | +1 |
| 2. | Demonstrations of class meetings by change facilitators and principal. | N/A | -1 | 0 | +1 |
| 3. | The administration's assessment of your use of Discipline Strategies as a criterion for teacher evaluation. | N/A | -1 | 0 | +1 |
| 4. | Faculty meetings to develop a "Philosophy of Discipline." | N/A | -1 | 0 | +1 |
| 5. | Faculty meetings to discuss development of a communication structure. | N/A | -1 | 0 | +1 |
| 6. | Informal discussions with other teachers in the Junior High about the use of Discipline Strategies. | N/A | -1 | 0 | +1 |
| 7. | Participation of teachers and satellite leaders in decision-making regarding Discipline Strategies, i.e. Teacher Corps Management Team, satellite leader meetings with the principal, etc. | N/A | -1 | 0 | +1 |
| 8. | Meetings of satellites during the summer of 1977 to work on plans for carrying out the Philosophy of Discipline. | N/A | -1 | 0 | +1 |
| 9. | The pre-school inservice workshop held in August, 1976 to introduce the new approach to discipline (Reality Therapy). | N/A | -1 | 0 | +1 |
| 10. | Attendance at workshops on Reality Therapy given by William Glasser. | N/A | -1 | 0 | +1 |
| 11. | Attitude toward Discipline Strategies expressed by other teachers. | N/A | -1 | 0 | +1 |
| 12. | Replacement of first year facilitator with new facilitators for the second year. | N/A | -1 | 0 | +1 |
| 13. | Conferences you have had with the assistant principal about discipline problems. | N/A | -1 | 0 | +1 |
| 14. | Conferences you have had with the principal about discipline problems. | N/A | -1 | 0 | +1 |

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| N/A<br>Not Applicable | - 1<br>Led to less involvement with Discipline Strategies | 0<br>Did not influence my involvement with Discipline Strategies | + 1<br>Led to more involvement with Discipline Strategies |
|---|---|---|---|

15. The Student Planning Room (SPR). N/A -1 0 +1

16. The copy of Glasser's book, Schools Without Failure. N/A -1 0 +1

17. Follow-up actions taken by the SPR staff person with students and teachers. N/A -1 0 +1

18. National Director of Teacher Corps', (Bill Smith) visit to the Junior High in March, 1977). N/A -1 0 +1

19. Summer courses offered by the university. N/A -1 0 +1

20. Number of school days missed because of bad weather. N/A -1 0 +1

21. Interactions with Teacher Corps leaders. N/A -1 0 +1

22. Making presentations or talking to others outside the Junior High about Discipline Strategies. N/A -1 0 +1

23. Seeing the effects of Discipline Strategies on students. N/A -1 0 +1

24. Feedback on tapes of my interactions with students. N/A -1 0 +1

25. Central office and school board support for Discipline Strategies. N/A -1 0 +1

26. Parent workshops and orientation sessions. N/A -1 0 +1

27. Inservice workshops held on days when school was cancelled due to bad weather. N/A -1 0 +1

28. Principal and vice-principal's use of Discipline Strategies with individual students. N/A -1 0 +1

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interventions that were made over the two years. All teachers were asked to circle the response that indicated how each intervention had influenced them.

Immediately after the questionnaire was completed in May, two members of the PAEI research team conducted in-depth group interviews with three key groups in the school, the leaders of the seventh and eighth grade teams and with the leadership team that was composed of key Teacher Corps personnel and the school principal and vice-principal. The purpose of these interviews was to explore in detail what these individuals felt had been the significant interventions during the two years and how these had influenced the faculty in their use of Discipline Strategies.

## Implementation Plan

Resources provided through Teacher Corps resulted in an implementation effort that might be described as enriched and intensive. A detailed description of the implementation effort is reported elsewhere, (Zigarmi, Goldstein, & Rutherford, 1979). An outline of the general implementation plan will help establish perspective for the findings to be described in this paper.

1. A change facilitator worked with groups and individuals to help them learn to use Discipline Strategies. During the first year a facilitator was full-time on site at the junior high. In the second year two facilitators worked one day a week with the faculty and staff. It took 2 days a week of their time to meet once a week with faculty.

2. Those teachers who wished took university courses with the tuition paid by Teacher Corps. Some of the courses offered were psychology courses that focused on an understanding of pupil behaviors.

3. Inservice training was provided by the change facilitators, Teacher Corps staff members, and the school principal in the form of summer workshops and weekly faculty or team meetings. Also, monies were provided to pay teachers to plan together in teams during the summer of 1977 to prepare for the second year of use of Discipline Strategies.

4. Teacher Corps monies also made it possible for the school administrators and approximately 20 percent of the teachers to travel out of state to attend workshops given by William Glasser.

Over the two years it seemed to the PAEI research team that the implementation effort moved through several major phases, Orientation and Initial Training, Reorienting Directions and Continued Training and, finally, Consolidation.

Phase I began with the first inservice workshop which was held before school started in August, 1976, and extended through November, 1976. During this time there were intensive efforts to train, assist and encourage teachers in their use of Discipline Strategies. By November a portion of the faculty was becoming increasingly vocal in their oppositions to the approach. These negative voices caused the school principal to become very concerned about the future of Discipline Strategies.

It was this concern that led to Phase 2, a time that represented a major change in the implementation effort. The entire faculty was organized into work groups for the purpose of developing the junior high's own Philosophy of Discipline. This effort continued through the remainder of the school year at which time a statement of philosophy was developed. At the same time there were continuing efforts to implement Discipline Strategies.

Phase 3 began during the summer of 1977 for those teachers who met to plan how they would implement the Philosophy of Discipline. For those who did not do this, Phase 2 began with the August, 1977, preschool workshop. This workshop was intended as time when the entire faculty would consider how to implement the Philosophy of Discipline. The entire second year was termed the Consolidation phase, a time when the change facilitators and school administrators focused their efforts on trying to get all teachers moving in the same direction. This

direction was use of Discipline Strategies in a manner compatible with the faculty's Philosophy of Discipline.

## Interview Data

In January, 1977, when the teachers were first asked the open-ended question about effects of various interventions on their use of Discipline Strategies, they were in the early stages of Phase 2. Responses to the questions were quite diffuse. There was only one response given by more than 20 percent of the respondents and that response was that they could think of no particular action or event that had influenced their use of Discipline Strategies. Mentioned most frequently as a positive influence (but by less than 20 percent of the respondents) was "talking and learning from other teachers." Teachers seemed to feel better about their own efforts when they recognized others were also struggling. Other influencing factors mentioned were seeing the approach work with students, reading the book, Schools Without Failure by Glasser, seeing video/tape demonstrations of Reality Therapy being used with students, help from the change facilitator, individually or in their team, and the initial workshop in August, 1976. By this time (January, 1977) one group of teachers had attended a Glasser workshop out of the state. Half of this group said the workshop had no influence on them. The other half indicated they were impressed with the presentations and felt they had better understanding of Reality Therapy. They did not, however, relate any specific changes they had made in their use of Discipline Strategies because of the workshop.

Because these responses were so diffuse it was decided to try again for information on intervention effects but with a bit different approach. In October, 1977, as a part of the LoU interview, a structured questioning approach

was used. First the teachers were asked about the influence of two specific interventions. These were (1) the process of developing the Philosophy of Discipline the faculty went through the previous year and (2) the August, 1977 preschool workshop where they were to decide what the faculty should do to follow through on the Philosophy of Discipline. A second step was to ask the open-ended question "Are there other actions or events that have influenced your use of Discipline Strategies?" Finally, they were cued by mentioning three or four other interventions to see if this would elicit any additional information.

Responses to the influence of the development of the Philosophy of Discipline were interesting and varied. Approximately 25 percent of the respondents felt the process was much too long and that it "turned them off". About 45 percent of the teachers felt basically positive about the process but only three indicated the process had actually influenced their use of Discipline Strategies. These three said that observing how difficult it was for the faculty to make decisions and arrive at a consensus caused them to be more patient with students when they were trying to make decisions.

Other teachers in this positive group felt the deliberations had brought the faculty closer together. They were surprised to learn how many other teachers felt positively about Discipline Strategies. Although they did not claim to have made any changes in their own use these teachers felt the process of developing a Philosophy of Discipline had been good for the faculty as a whole. Among this positive group there were some who felt the process lasted too long. Participating in the development of the Philosophy of Discipline apparently had no influence on the remaining 30 percent of the faculty.

The perceived influence of the August, 1977 workshop was much more evident; it had virtually none. Except for seven teachers the faculty could not even

remember what had happened or they felt it had no influence at all on their use. Out of the seven who did recall the workshop, four teachers felt it was good because it caused the entire faculty to refocus on where they were headed. Even so, they did not feel the workshop had influenced their personal use of Discipline Strategies. The other three teachers who remembered the workshop reported they were not influenced by it either.

The open-ended question and the cueing that followed the structured intervention question produced responses very similar to the January questioning. No single intervention was mentioned, whether its influence be positive or negative, by more than 25 percent of the respondents. The positive influences mentioned most were "seeing Discipline Strategies work with students and sharing and working with other teachers."

Several interventions that occurred between January and October were also mentioned by several teachers. These included the time teams spent planning together during the summer, 1977; the two psychology courses taken during the summer of 1977 and attendance at a Glasser workshop on Reality Therapy in the spring of 1977. This second out-of-state workshop had a much more positive influence on most of the teachers who attended than did the earlier Glasser workshop. At the latter workshop the junior high teachers found they were more advanced in their use of Discipline Strategies than were most of the other participants. Other participants were actually seeking advice and information from them. Because of this most of the junior high teachers in attendance felt very good and a bit surprised about the progress they had made and this gave them a real motivational boost. Interestingly, the teachers reported they learned nothing new at the workshop and did not really change their own use except to try harder.

Other responses were given to the open-ended and cued questions but they were random and never by more than two or three people.

Group Interview Data

The central purpose of the group interviews was to investigate the perceptions of the teachers regarding the overall implementation process and the most important interventions and to compare these with the perceptions of the change facilitators and administrators.

The first interviews were with the leadership team which included staff from the Teacher Corps project that had the greatest responsibility for the implementation effort plus the principal and vice-principal. Interviews with the ninth-grade and eighth-grade team leaders followed this. Each interview session was about forty minutes in length and included several questions.

Question 1. What was the overall game plan[3] for the implementation effort?

One member of the leadership team said it was an effort to provide long-term inservice type support based on the principles of the Concerns-Based Adoption Model (CBAM) (Hall, Wallace & Dossett, 1973). Another said it was developmental and it was not known in advance exactly what the plan was to be. A third person said the effort was planned around teacher involvement. It involved diagnosing where teachers were and moving them to a more humanistic, problem-solving approach to discipline. This same individual said some teachers did not have enough early involvement, thus they felt Reality Therapy was imposed on them when it was not.

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[3]Game plan is defined by the PAEI Program as the combination of all major components of the innovation implementation effort.

Some teachers felt that Reality Therapy was introduced as a model and that it was initially intended for the junior high to develop its own approach from that. Others felt it was intended that Reality Therapy would be the approach and it was modified as a result of teacher pressures. A predetermined implementation plan was assumed by some teachers while others felt the plan developed as they went along. None of the teachers mentioned the process of being one where their needs were diagnosed and then attended to. Obviously, if there was an overall game plan, there was no agreement among the faculty or between faculty and change facilitators on what the plan was.

Question 2. How would you divide the two years into phases?

Actually there was only one response from the leadership team to this question with one person agreeing with that response. Three phases were suggested by the one respondent. In the first year (including the advance preparation time) there were two phases. First, the teachers had to recognize the need for a humanistic, problem-solving approach to discipline. Next, as a group they were trained in how to use such an approach. During the second year they were implementing and modifying the approach in small groups and individually.

This description of phases seems to depict the implementation process as a smooth flowing development moving from need recognition to learning, to doing. As seen by the research team the process did not flow that smoothly but was one that involved several major shifts in response to teacher pressures.

Teachers were not asked question #2.

Question 3. What key events or actions influenced teachers' (your) use of Discipline Strategies?

Responses from the leadership team are summarized in the following statements:

a. Keeping the subject of discipline in front of the faculty constantly as a topic of discussion.

b. Development of the Philosophy of Discipline led positive voices in faculty to assert themselves over the negative voices.

c. Constant support and assistance from on-site change facilitators, especially during the first year.

d. Demonstration of the approach by administrators and facilitators.

e. Role playing of the approach by the principal at the very first workshop (August, 1976) not only won her over but others also.

Given all the interventions that happened during the two years, this was a surprisingly brief list of nominations.

Teacher responses were very consistent with those provided in the individual interviews of October, 1977. They agreed with the leadership team that going through the Philosophy of Discipline process was useful. It gave all teachers an opportunity to speak up and in the end it brought the faculty together and brought the positive voices to the fore. They felt the actual statement of the philosophy was not important. Also, they felt the change facilitators were helpful, particularly the on-site person in the first year. There were also a few teachers who responded negatively to the facilitators.

The summer, 1977, planning meetings of the teams were viewed by a number of the teachers as being very important because it allowed them to make preparation for implementing the Philosophy of Discipline they had developed. This was not mentioned by the leadership team as an important intervention. This omission seemed a bit strange since Teacher Corps monies were used to support the summer planning.

Teachers also reiterated the importance of their interactions with other teachers. This included some of the Philosophy of Discipline interactions but

those occurring in teams or with individual teachers were more meaningful. This influence was also not mentioned by the leadership team.

It was interesting that the leadership team did not view the free tuition for college courses as an important intervention nor did the teachers. Yet, there was considerable praise from teachers for the two psychology courses taught in the summer, 1977. The fact that they were made possible by the Teacher Corps project seemed to escape the teachers.

Although the teachers and the leadership team did not agree on all points, for the most part they talked about the same things. Teachers did mention more interventions than the change leaders, but the total number of interventions mentioned was small compared to the number of interventions that actually occurred.

There were, of course, some interventions that were viewed negatively but positive feelings about the implementation effort outweighed the negative. This was confirmed by the following questionnaire data.

Intervention Questionnaire

An effort was made to gain some objective data on intervention efforts by using the Intervention Questionnaire (Figure 1). It was developed by the research team with the cooperation and approval of the school principal. The questionnaire was administered at the same time as the group interviews in May, 1978. A total of 39 teachers responded.

Figure 2 presents two analyses that were conducted on the questionnaire responses. By assigning values to the four response choices (N/A = 0; -1 = 2; 0 = 3; +1 = 4) a mean score for each item was determined. These values are shown in the right-hand column. Using the scoring system above, mean scores

Figure 2

Analysis of Intervention Questionnaire Responses
By mean values* and Response Percentages**

| N/A | - 1 | 0 | + 1 |
|---|---|---|---|
| Not Applicable | Led to less involvement with Discipline Strategies | Did not influence my involvement with Discipline Strategies | Led to more involvement with Discipline Strategies |

| | | | | | | | Mean |
|---|---|---|---|---|---|---|---|
| 1. | Work of change facilitators with your satellite on Discipline Strategies during Planning period meetings. | 2<br>N/A | 5<br>-1 | 32<br>0 | 60<br>+1 | | 3.6 |
| 2. | Demonstrations of class meetings by change facilitators and principal. | 7<br>N/A | 5<br>-1 | 55<br>0 | 30<br>+1 | | 3.3 |
| 3. | The administration's assessment of your use of Discipline Strategies as a criterion for teacher evaluation. | 15<br>N/A | 15<br>-1 | 50<br>0 | 17<br>+1 | | 3.0 |
| 4. | Faculty meetings to develop a "Philosophy of Discipline." | 2<br>N/A | 35<br>-1 | 30<br>0 | 32<br>+1 | | 3.0 |
| 5. | Faculty meetings to discuss development of a communication structure. | 2<br>N/A | 25<br>-1 | 37<br>0 | 30<br>+1 | | 3.0 |
| 6. | Informal discussions with other teachers in the Junior High about the use of Discipline Strategies. | -<br>N/A | 17<br>-1 | 25<br>0 | 57<br>+1 | | 3.4 |
| 7. | Participation of teachers and satellite leaders in decision-making regarding Discipline Strategies, i.e. Teacher Corps Management Team, satellite leader meetings with the principal, etc. | 12<br>N/A | 7<br>-1 | 32<br>0 | 47<br>+1 | | 3.4 |
| 8. | Meetings of satellites during the summer of 1977 to work on plans for carrying out the Philosophy of Discipline. | 27<br>N/A | 2<br>-1 | 20<br>0 | 50<br>+1 | | 3.6 |
| 9. | The pre-school inservice workshop held in August, 1976 to introduce the new approach to discipline (Reality Therapy). | 7<br>N/A | 10<br>-1 | 22<br>0 | 60<br>+1 | | 3.5 |
| 10. | Attendance at workshops on Reality Therapy given by William Glasser. | 52<br>N/A | 0<br>-1 | 7<br>0 | 40<br>+1 | | 3.8 |
| 11. | Attitude toward Discipline Strategies expressed by other teachers. | 2<br>N/A | 25<br>-1 | 50<br>0 | 20<br>+1 | | 2.9 |
| 12. | Replacement of first year facilitator with new facilitators for the second year. | 7<br>N/A | 17<br>-1 | 52<br>0 | 22<br>+1 | | 3.0 |
| 13. | Conferences you have had with the assistant principal about discipline problems. | 17<br>N/A | 37<br>-1 | 30<br>0 | 15<br>+1 | | 2.7 |
| 14. | Conferences you have had with the principal about discipline problems. | 17<br>N/A | 7<br>-1 | 37<br>0 | 37<br>+1 | | 3.3 |

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| N/A Not Applicable | - 1 Led to less involvement with Discipline Strategies | 0 Did not influence my involvement with Discipline Strategies | + 1 Led to more involvement with Discipline Strategies | | | | Mean |
|---|---|---|---|---|---|---|---|
| 15. The Student Planning Room (SPR). | | | 12 | 7 | 45 | 30 | 3.2 |
| | | | N/A | -1 | 0 | +1 | |
| 16. The copy of Glasser's book, Schools Without Failure. | | | 5 | 10 | 20 | 60 | 3.5 |
| | | | N/A | -1 | 0 | +1 | |
| 17. Follow-up actions taken by the SPR staff person with students and teachers. | | | 17 | 15 | 47 | 15 | 3.0 |
| | | | N/A | -1 | 0 | +1 | |
| 18. National Director of Teacher Corps', (Bill Smith) visit to the Junior High in March, 1977). | | | 32 | 5 | 57 | 2 | 3.0 |
| | | | N/A | -1 | 0 | +1 | |
| 19. Summer courses offered by the university. | | | 35 | 0 | 40 | 25 | 3.4 |
| | | | N/A | -1 | 0 | +1 | |
| 20. Number of school days missed because of bad weather. | | | 27 | 22 | 47 | 0 | 2.7 |
| | | | N/A | -1 | 0 | +1 | |
| 21. Interactions with Teacher Corps leaders. | | | 22 | 5 | 57 | 15 | 3.1 |
| | | | N/A | -1 | 0 | +1 | |
| 22. Making presentations or talking to others outside the Junior High about Discipline Strategies. | | | 42 | 2 | 25 | 30 | 3.4 |
| | | | N/A | -1 | 0 | +1 | |
| 23. Seeing the effects of Discipline Strategies on students. | | | - | 27 | 15 | 55 | 3.3 |
| | | | N/A | -1 | 0 | +1 | |
| 24. Feedback on tapes of my interactions with students. | | | 17 | 5 | 35 | 37 | 3.4 |
| | | | N/A | -1 | 0 | +1 | |
| 25. Central office and school board support for Discipline Strategies. | | | 35 | 5 | 40 | 20 | 3.2 |
| | | | N/A | -1 | 0 | +1 | |
| 26. Parent workshops and orientation sessions. | | | 32 | 7 | 40 | 20 | 3.1 |
| | | | N/A | -1 | 0 | +1 | |
| 27. Inservice workshops held on days when school was cancelled due to bad weather. | | | 10 | 12 | 57 | 20 | 3.1 |
| | | | N/A | -1 | 0 | +1 | |
| 28. Principal and vice-principal's use of Discipline Strategies with individual students. | | | 5 | 22 | 27 | 42 | 3.2 |
| | | | N/A | -1 | 0 | +1 | |

* Above each response choice is shown the percentage of responses.

** Values assigned to responses are N/A = 0; -1 = 2; 0 = 3; +1 = 4

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above 3.0 are interpreted to be positive responses to the intervention and a score below 3.0 negative responses. Mean scores of 3.0 were viewed as neutral responses.

Only three interventions (#s 11, 13, and 20) were rated negatively. Two of those (#s 11 and 20) were unplanned interventions. Nineteen of the items were rated positively with six receiving a neutral rating. An immediate observation is that the teachers were, for the most part, very positive about the interventions suggested on the questionnaire. At the same time the fact that out of all responses agreement on any one item choice never exceeded 60% indicates considerable variation in the feelings of teachers about each intervention. There was not as much variation on the negative response choice (-1). On 21 of the 28 items, responses numbered fewer than 20 percent. From this one can conclude that the interventions listed were not perceived to have significant negative effects. This in itself seems to be quite an accomplishment for an implementation effort of this length and magnitude.

An attempt was made both statistically and subjectively to group or factor the items to determine if certain types of interventions elicited similar responses. No such groupings were evident. For example, five items were rated 3.5 or higher (#s 1, 8, 9, 10 and 16). The first four represent an interactive, sharing mode while the last one is clearly an individual activity.

Data from the questionnaire offer at least two interesting comparisons with the intervention information gained through interviews. First, a number of interventions rated positively on the questionnaire were never or rarely mentioned by teachers in the interviews. Second, for 12 of the items more than 30 percent of the responses were positive (+1). In the interviews no intervention was mentioned positively by even 30 percent of the teachers. It was not

possible from available data to determine the causes of the variance in the interview and questionnaire responses nor was it possible to ascertain which body of information was most valid. Future research will have to give consideration to the most reliable and valid means for collecting intervention data.

One other type of analysis was conducted on the Intervention Questionnaire and this is shown in Figure 3. This compared responses of users and nonusers (as determined by LoU interviews) of Discipline Strategies at the end of the two year study, (April, 1978). These interviews revealed that of the 42 teachers who were in the school for the full two years, 19% (N=8) were rated as nonusers. Out of the 34 users who were in the school for the full two years, 26 returned useable questionnaires. The responses of users and nonusers are compared in Figure 3.

For each item and item choice on the questionnaire the percentage of respondents in each group is shown. A look at these data show that for every item except one (#10) the nonusers rated the intervention as having no influence (0) or rated it negatively (-1).

The users on the other hand rated eleven of the interventions positively (above 50%). At the same time this group was more discriminating in their responding as evidenced by the variations in item responses. It should be recalled that the N/A responses were not counted, thus the percentages are not always based on the total N of either group.

Figure 3

Responses of Users and Nonusers to the Intervention Questionnaire
(all number represent percentages)

| Intervention Questionnaire Item Numbers | NONUSERS N = 8 | | | USERS N = 26 | | |
|---|---|---|---|---|---|---|
| | -1 | 0 | +1 | -1 | 0 | +1 |
| 1 | 25 | 62 | 12 | 0 | 28 | 72 |
| 2 | 25 | 62 | 12 | 0 | 60 | 40 |
| 3 | 25 | 62 | 12 | 19 | 62 | 19 |
| 4 | 37 | 62 | 0 | 35 | 23 | 42 |
| 5 | 29 | 71 | 0 | 20 | 36 | 44 |
| 6 | 50 | 50 | 0 | 8 | 15 | 77 |
| 7 | 29 | 71 | 0 | 4 | 26 | 70 |
| 8 | 50 | 50 | 0 | 0 | 26 | 74 |
| 9 | 25 | 50 | 25 | 4 | 19 | 77 |
| 10 | 0 | 50 | 50 | 0 | 12 | 87 |
| 11 | 37 | 62 | 0 | 25 | 54 | 21 |
| 12 | 12 | 75 | 12 | 16 | 52 | 32 |
| 13 | 60 | 40 | 0 | 36 | 45 | 18 |
| 14 | 33 | 67 | 0 | 4 | 41 | 55 |
| 15 | 0 | 60 | 40 | 8 | 56 | 35 |
| 16 | 37 | 37 | 25 | 4 | 17 | 80 |
| 17 | 20 | 80 | 0 | 24 | 62 | 14 |
| 18 | 17 | 83 | 0 | 6 | 89 | 6 |
| 19 | - | 100 | - | 0 | 50 | 50 |
| 20 | - | 100 | - | 45 | 55 | 0 |
| 21 | 12 | 87 | 0 | 5 | 70 | 25 |
| 22 | - | 100 | - | 0 | 31 | 69 |
| 23 | 71 | 29 | 0 | 19 | 15 | 65 |
| 24 | 20 | 80 | 0 | 5 | 38 | 57 |
| 25 | - | 100 | - | 12 | 62 | 25 |
| 26 | 14 | 86 | 0 | 11 | 44 | 44 |
| 27 | - | 86 | 14 | 16 | 56 | 28 |

Discussion

This two-year study of interventions and their effects had many purposes but chief among them was to determine, how teachers perceived they were influenced by the various interventions that occurred during the two years of the study. Using this kind of information collected with other innovations in other settings it is a long-term goal of the PAEI program to develop a theory or model of interventions (and intervening). If this can be done then change facilitators will have a valuable tool for use in planning and executing implementation efforts.

What can be said about intervention effects on the users? There were very few instances where a single intervention had a specific and identifiable effect if an effect is thought of as an immediate and specific change in the way a teacher used the innovation. Instead, the effects seemed to be cumulative, influencing first attitudes, enthusiasm and self-confidence and then their actual use of Discipline Strategies. For example, teachers who were having difficulty finding time to use and carry through on all aspects of Discipline Strategies expressed some relief when they learned other teachers were having the same difficulty. This in itself did not resolve their management problems but now it was easier for them to hear suggestions from change facilitators and other teachers. Changes ultimately made by a teacher usually were his or her adaptation of all the ideas received from others or they were arrived at through collaborative efforts in the team. In either situation, actual changes in the way a teacher used Discipline Strategies were often several steps removed from the intervention(s) that motivated the change.

Accumulated effects of interventions were reflected in yet another way. Throughout the two years, when teachers spoke of the influence of Discipline

Strategies, either in response to a direct question or spontaneously, they often spoke of how they had changed in their interactions with students. While they cited instances of the effects of Discipline Strategies on the students, the changes going on within themselves were the ones they were most aware of. Teachers spoke of how they were much more patient with students now and how relaxing it was to talk and reason with the students rather than punishing them. They admitted that they had not always taken time to hear the student's side of a story and now that they were doing this they were realizing how responsible the students could be. It seemed that first the teachers had to change before they could direct their full attention to the effects of Discipline Strategies on students.

How quickly do teachers move to a point of satisfactory use of a new program? The new approach to discipline represented a complex innovation. Not only was it difficult to learn how to employ all the steps in the approach it was also very value laden. The approach was based on a particular set of beliefs about student discipline that were somewhat different from those held by some teachers. Undoubtedly, this contributed to the fact that at the end of two years of rather intensive implementation efforts in a single school 19 percent of the faculty who were in the junior high both years were not using Discipline Strategies and an additional 7 percent were still having much trouble using it according to LoU ratings. Only one team, consisting of four teachers, had reached a point of stable use as determined by their LoU rating. All teachers in the team were using Discipline Strategies with ease and were focusing on ways to strengthen their collaborative use to have greater positive influence on students. These findings support findings from previous PAEI research (Hall, 1977), (LaShier, 1977), (Rutherford, 1975), indicating that to use a complex

innovation, and most are complex, in an effective manner requires two or more years for most teachers.

What is the meaning of these findings? For evaluators it might represent data by which to judge success or failure of the implementation effort. From the CBAM perspective, change is a process individuals experience differentially and as they do they should be assisted not evaluated, therefore, these data should be used diagnostically not judgmentally. With this type of information change facilitators can plan interventions that will help teachers progress in their use of an innovation and facilitators will know when and with whom what kinds of interventions will or will not work. Also, the findings should encourage facilitators and administrators to be patient during times of change.

What was the overall influence of the interventions in the junior high? The way teachers progressed in their use of Discipline Strategies and the way they responded to the various interventions was very individualistic. True, you might characterize groups of teachers, such as those who were comfortable with the innovation, those who were struggling, those who were resisting it or those who supported it. Yet, no matter what group, within it each teacher was experiencing different problems, successes and concerns as he or she attempted to use Discipline Strategies. Each teacher wanted assistance that responded to his or her specific need.

Although the implementation effort in the junior high was intensive and enriched still most of the efforts focused on groups whether it be the entire faculty or teams. This is why a number of teachers, when talking about the contributions of the change facilitators, reported that their work would have been more useful had the facilitators helped them with specific students or situations in their classroom.

How are nonusers of an innovation to be handled? This question was of considerable concern to the facilitators and administrators in this change effort. Among the eight nonusers there were seven who were persistent nonusers. The eighth one tried to use Discipline Strategies but gave up after much frustration. The seven were either opposed to the new approach or felt they had no discipline problems so the new approach was not needed. Several other teachers who felt this way left the school during the implementation period. It was this group that set the initial tone for the implementation which continued until the development of the Philosophy of Discipline changed that. Previous PAEI research has shown that regardless of the innovation or the setting persons of this type are common (Hall & Loucks, 1977).

Could something more or different have been done to change the seven nonusers to users? Information gathered over two years suggests there was a low probability of changing them. To do so would certainly have required much time and effort. After two years and much reflection this writer cannot predict with confidence what type of interventions would have worked effectively with these individuals.

If this group could not be changed how should they have been handled? Neutralizing their negative influence on the entire faculty through the process of developing the Philosophy of Discipline process was probably the most significant intervention that could have occurred in terms of the overall implementation effort. Since this was done through peer interactions rather than administrative pressures it minimized hostilities.

The question change facilitators and administrators most often ask of our research team is "what do you do about those teachers who resist change? Neutralizing their negative influence, as happened in this study, is certainly

one thing that can be done but it is not a sufficient answer for most change leaders. Perhaps there is no answer that will be adequate but this study and other research conducted by the PAEI project have provided some insights that may be helpful to change leders.

Since it is very likely that in any change effort there will be teachers who will not want to change, an important step in the change process is to plan in advance how these teachers will be handled. In our research we have found that there is often an unanswered assumption that when an innovation is introduced into a school all teachers must use it. At the beginning of the implementation effort in the junior high school we were often told by teachers and facilitators that the new approach to discipline "would not work" unless all teachers in the building used it. However, at the end of two years they had found that the new program could not work without the full participatin of all teachers. Thus, it is important to ask and answer in advance of implementation if it is essential that all teachers use the innovation.

When teachers are asked to change to a new program or process it infers that their present performance needs to be improved. It also infers that the innovation will lead to improved performance. It is only logical and natural that before initiating a change teachers would want to know what inadequacies in their teaching behavior the change is supposed to correct. They also want to know if the proposed innovation is better than what they are doing. After all, not all innovations are good. Many of the faculty members in this junior high school were having difficulty with discipline so as a group they decided a new approach to discipline was needed. There were, however, individual faculty members who were having no difficulty with student management and discipline so they saw no real need to try a new approach-- although some did try it. In

situations where individual teachers are already accomplishing what the change is intended to accomplish, it may be unnecessary and even unwise to expect them to use the innovation.

As mentioned above, there were others who were having difficulty but resisted change. This type of teacher, the one who needs to change for improvement but will not, is the type that poses the greatest problem for chnge facilitators. In situations where the implementation effort is not so intense as it was in the junior high these teachers may do enough to deceive change leaders into believing they are using the innovation but they actually do not change. Because the implementation effort in the junior high was so intense it was not possible for the resistant teachers to escape notice. The result was that some teachers who probably would not have changed under typical implementation efforts did begin to use the new approach to discipline. Other teachers elected to transfer to another school or leave teaching rather than change. There were still others who neither changed nor left. I would, however, predict that if the pressure for change in the school was maintained as it was in the first two years some of the remaining resisters would either change or leave the school.

Causing resistant teachers to change schools or to leave teaching should not be the goal of change facilitators and it was not the goal of the change facilitators in the junior high. It is essential, though, that teachers who need to change and will not be dealt with in a direct, professional manner. They should be given all the assistance and support they need to change their teaching behavior but they should not be excused from the responsibility of improving.

Implications

The findings of this study have the following implications for any persons who may be responsible for managing change in schools.

1. Changes in teachers seem to result from an accumulation of interventions rather than specific or immediate cause and effect relations. For this reason any implementation plan should provide for continuous inservice support and assistance. Intermittent one-or-two day workshops are just not sufficient. The use of an on-site consultant in this case clearly addressed the need for regular inservice assistance.

2. When teachers do change they usually perceive it to be of their initiative rather than the result of an intervention or series of interventions. It seems that teachers often do not recognize interventions as such or they do not recognize the relation between interventions and their influence on them.

3. Changes in teachers' feelings and attitudes seem to precede any change in their actual use of an innovation. This finding and finding #2 suggest that those who are managing change should not expect that their interventions, no matter how appropriate, will result in immediate, discernible change in teacher behavior.

4. If the change process is to be maximally effective most interventions must be directed at individuals not groups.

5. Teacher-to-teacher interactions and support can be powerful positive factors in an implementation effort. Therefore, any implementation plan should be designed to promote this.

6. No matter what the innovation is it is very probable that some of the intended participants will not actually use the innovation (Hall & Loucks, 1977). How these teachers are to be handled and what impact their nonuse will have on the ultimate outcomes of the new program should be anticipated and

planned for as a part of the implementation process. For sure, change facilitators should avoid falling into the trap of devoting more time and energy to the few nonusers than all the teachers who are attempting to use the innovation.

7. It requires much time and effort for teachers to learn to use new programs effectively. Any evaluation of student outcomes should be delayed until an effective level of use has been accomplished by most of the faculty, (Hall & Loucks, 1977). For most innovations this will require at least two if not three or more years.

## A Final Statement

Making changes in educational programs is a demanding task. If effective changes are to be made in schools, the implementation process guiding and supporting those changes must be carefully planned and carefully executed. While much is yet unknown about the development and execution of systematic implementation efforts, much more is known now than just a few years ago. It is important, then, that those who are responsible for change efforts avail themselves of the latest knowledge in change research and incorporate that into their implementation plans.

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